

Job-Search Strategies



FOR CHEMICAL PROFESSIONALS



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AMERICAN CHEMICAL SOCIETY
Department of Career Services

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Job-Search Strategies for Chemical Professionals



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The American Chemical Society (ACS) Department of Career Services (DCS) offers career assistance and information on employment issues to chemistry professionals. This booklet was written for the chemist at any career stage. Previous editions, *Targeting the Job Market*, emphasized market demographics to aid in finding the job most suited for an individual. Because market changes have accelerated and remain volatile—due to investment dynamics as well as changes in business climate and in society overall—this edition concentrates on processes to identify and find jobs. It also includes resources for the most up-to-date information on the job marketplace. This 2003 edition was prepared by Donald D. Bly PhD and reviewed by James D. Burke PhD. Both are ACS Career Consultants. Raymond O'Donnell contributed to Chapter 7. Elaine Diggs, ACS Senior Membership Associate, updated the publication for completeness of resources. Jura N. Viesulas, Manager of Professional Services, reviewed the final manuscript. The Department is grateful to the writers and reviewers for their time and effort in developing this guide.

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Preface



An effective job search has many components. In basic terms, you identify the market you want to access, then plan and execute an effective campaign to find a job in that market.

This publication is to help you assess your values, desires, and needs for application to your job search. It discusses what may motivate you to succeed and how to identify your skills for targeting various jobs. It also describes changing trends in the employment marketplace for chemical scientists, shows you how to find the hidden job market through networking as well as cold calling, and gives tips on locating specific job segments along with staying marketable.

Other necessary components of the job search, such as creating a winning résumé and acing an interview, are covered in complementary publications available to American Chemical Society members through the Department of Career Services: *Résumé Preparation—Tips for Chemical Professionals* and *Interviewing Skills for Chemical Professionals*.

DISCLAIMER

This guide is meant to serve as a basic information resource about job searching for chemical professionals. Information was compiled from published and other sources deemed reliable (see Appendix A, Appendix B, and Appendix C). Readers should consult the appropriate authorities for additional information or assistance beyond the scope of this guide. The American Chemical Society does not guarantee employment to any reader of this document or accept responsibility for setting standards with regard to any topic discussed here. ACS and the authors, contributors, and reviewers are not responsible for the accuracy of information obtained from other sources.

Outlining Your Job Search

Although conducting an effective job search is challenging, it also can be rewarding. Just as using the right instrumentation makes experiments easier to perform and yields more accurate information, using the right tools for your job search will mean more positive results.

Your success in the job market depends not only on your skills but also on your ability to organize your search and to target the job market segment that's right for you. You must also keep your training current. And remember to take advantage of the many services offered by the ACS.

Knowing Yourself

Sending out résumés and cover letters at random does not increase your chances for success. The better you know yourself—your skills, abilities, values, and needs—the more prepared you'll be to identify which organizations are right or wrong and to sell yourself to your ideal employer. The best way to get a satisfying job is for you to target employers that meet your professional criteria and your personal priorities. To do this, you'll need to evaluate the marketplace and conduct a detailed personal assessment, then find and pursue the best job for you.

Traditionally, chemists have gone to work for large companies or universities, but many other options are increasingly available such as working for small companies, starting your own business, or joining a consulting firm. This guide can help you know yourself and research the market carefully for a more effective approach than the "shotgun" method, regardless of the job option you choose.

Using the ACS Department of Career Services

Be sure to take advantage of the American Chemical Society's DCS benefits to members. The many tools for your job search include a wide range of career-related programs, publications, services, and consultants. See Appendix A for more information.

Keeping Yourself Current

Track your accomplishments and new skills by keeping notes in a personal file. Reassess your values, drivers, and skills (see Chapter 3) and update your résumé annually. A good way to keep in touch with potential employers you've targeted is to send them your updated résumé with a cover letter. Periodically connect with your networking contacts too, so they're ready to assist you (see Chapter 5).



It's not enough these days to have mastery in a field of chemistry. You'll also need a knowledge of science, communication skills, problem-solving ability, computer literacy, versatility, practical experience, business orientation, and interpersonal as well as leadership skills.



Because job security is only as good as your ability to find another job, stay marketable by keeping your skills and résumé up-to-date.

State of the Marketplace

CHAPTER TWO

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Chemistry Jobs in the 21st Century

The concept of a “job” emerged from a need to manage work done in growing factories and bureaucracies of the industrialized world. For chemists, an employment offer was based on the organization’s long-term needs, where acceptance signified a lifetime commitment of mutual loyalty as part of the agreement. Pay increases came over time, and businesses were run like families. Having the job for life was an unspoken guarantee, provided the employee remained conscientious and loyal.

Such long-term employment security is now a thing of the past. Employment offers and continuation depend on current business needs, with acceptance of employment based on the individual’s short-term personal needs. For many chemists, employment and pay rely on business success along with performance and fit in the organization.

Given all these factors, job security today means the ability to find another job readily. To understand the chemist’s employment arena, it helps to know the major factors that influence the chemical industry and how they will affect the progression of your career.

Organizational Changes and Their Job Market Impact

You must relate your skills and abilities to current market opportunities, so you can determine where to focus your search; this means learning about today’s employers as well as staying flexible.

To survive and prosper in a shifting economy with increasing global competition, many employers have made significant organizational changes such as:

- Substantial reduction in workforce size
- Flattened managerial structure, with more emphasis on team projects
- Focus on core businesses, with companies selling off unprofitable or peripheral operations
- Relentless cost reduction
- Increased outsourcing of R&D and other services
- Renewed emphasis on inventory control, quality, and customer service
- Heightened response to more domestic and international competition.



Long-term employment with a single employer is not the pattern of a chemist’s career today.



The number of small chemical companies is expected to increase modestly in the next few years, with large chemical companies experiencing little or no growth over the same period.

These changes are expected to continue, and they inevitably affect hiring and staffing.

Related trends and resulting effects follow:

- Organizations with flat or decreased staffing hire only to replace resigning or retiring employees or to achieve a different skill mix
- Employers rely increasingly on contract and temporary workers to cover short-term needs; many organizations also view temporary employment as a way to identify candidates for their regular workforce
- Overall, R&D funding is shifting to reflect an intensified focus on business results
- Because chemical professionals deal with advanced technologies in many fields, you must be able to communicate with scientists and engineers in other disciplines
- The chemical and related industries face not only strong international competition but also a globalization of manufacturing
- Production is emphasized and, in general, product life cycles are shorter.



The organization of the 21st century is leaner, less hierarchical, and more focused on cost control than in the past.

These changes mean that work must be accomplished more efficiently and with higher accuracy, because there's a smaller margin for error.

Researching Potential Employers

Use library services for print materials and the Internet for search engines and websites to answer these questions:

- What skills and abilities are employers looking for?
- What areas of technology seem growing or declining?
- Have recent organizational trends changed?
- What do salaries look like? (Use ACS Salary Comparator)
- What kinds of positions are posted?
- What regions of the country are promising for the chemical profession?

Current resources will connect you to the *published* job market; your professional network (see Chapter 5) and contacts can identify leads in the *unpublished* job market. Recognize that any employment forecast can become rapidly outdated, so be sure to seek the most recent information sources. To help you view those

sources in context, check the ACS career website at www.chemistry.org/careers for long-term trends gleaned from recent ACS and Bureau of Labor Statistics employment surveys and reports.



See Appendix C for more electronic resources.

Job Market Outlook

Marketplace changes are defining a new job market for chemists.

Increased demand for new consumer goods such as pharmaceuticals, personal care products, and specialty chemicals is expected to create jobs in these industrial segments. In essence, this will counterbalance the slower growth and loss of jobs predicted in the traditional chemical industry (for example, industrial chemicals).

The Bureau of Labor Statistics projects:

- Reasonable growth in employment for chemical professionals and technicians overall, due to scientific and medical R&D and an increase in the technical service industry
- Job losses for scientists in petroleum, heavy chemicals, plastic and synthetic materials, agricultural chemicals, and paints as well as allied products.

Most new jobs in chemistry are anticipated in these areas:

- Pharmaceuticals and biotechnology
- Independent research and testing services
- Specialty chemicals
- Toxicology
- Information specialties
- Patent law
- Marketing and sales
- Industry public relations
- Consulting.

Clearly, to maintain a prosperous career, chemists must be flexible and open to change.

Salary Generalities

Factors that influence salaries are:

- **Degree**—Doctoral chemists, on average, can earn 50% more than those with a bachelor's degree. Master's chemists have greater earnings potential than bachelor's chemists, but not as great as that of doctoral chemists.



The ACS Department of Career Services has published several reports based on surveys of industry, government, and academic senior management. The issues include areas of growth and decline, shifts in R&D funding, economic factors, and federal policies affecting the chemical industry. These reports also estimate supply of and demand for chemical professionals, focusing on hiring trends and degrees granted in the chemical sciences. Call 800-227-5558 for details.



Degree level, years of experience, region, and other factors affect what you will earn.

- **Type of employer**—Industrial chemists generally earn more than those in academic or government positions, and salaries are higher overall in certain industries such as petroleum, electronics, and pharmaceuticals. For example, as of this writing, pharmaceutical chemists earn significantly more than other chemists because of a current supply–demand imbalance.
- **Experience**—Typically, nonacademic salaries rise fairly steadily for about 20–25 years after graduation and then level off. And in general, salaries go up with an increase in supervisory responsibilities.
- **Other factors**—Salaries also vary in geographic regions of the US and other countries. Ordinarily, large companies pay more than small companies; however, other benefits are more easily negotiated with small companies than with the larger ones.



Always request the most current survey document.

ACS conducts surveys on salaries for starting and experienced chemists and publishes the data annually in *Chemical & Engineering News*, (normally in the August issue) as well as more detailed reports; for example:

- *Salary Survey*—Annual survey of the domestic employment and salaries of ACS members. \$250 plus applicable tax, shipping, and handling.
- *Starting Salary Survey*—employment and salaries of new chemistry and chemical engineering graduates, along with education data. \$49.95 plus applicable tax, shipping, and handling.



Consult the annual ACS salary surveys or the Salary Comparator to determine your salary level expectations.

We also provide an ACS Salary Comparator; ACS members can access this useful calculator online (www.chemistry.org/careers) to estimate salaries and make comparisons involving numerous variables (job type, location, degree, experience, and so on). ACS keeps the Salary Comparator data current.

Personal Assessment

Before taking any job, you need to understand whether it can meet your values, satisfy your drivers, and match your skills. This calls for conducting a personal assessment, then using your results to evaluate possible jobs and career scenarios.

Values

Knowing your desires and needs is essential to being happy and productive in your job. Use honest introspection and responses during your interview to answer these questions:

- *Do you want to do R&D? Applied research? Sales? A job outside the lab? Something else?*
- *Do you have a strong preference to work alone or in a team, or to lead teams?*
- *Do you have the skills to do successfully what you want to do? If not, what is needed?*
- *Can you do the job that's being offered to you? If not, will you receive initial training?*
- *Are your credentials or country of citizenship or residency an issue?*
- *Is the location of the job a problem? (It could be, for example, if you're a regular caregiver for other family members.)*
- *Is travel or time away from home required?*
- *Do you need to be able to publish? To attend scientific or other meetings?*
- *Are the benefits appropriate for your needs (health and other insurance)?*
- *Are special religious holidays a concern?*
- *What specialized resources would you need for your job? (Examples might be large expensive equipment like NMRs or mass spectrometers, or highly specific library publications and journals.)*

The better you know your values and job demands, the better prepared you will be to find your ideal employer.

Drivers

In addition to your personal values, you have professional motivators that influence why and how you do your job as well as what you want your job to provide.



Being happy and productive at work requires the proper fit of your values, drivers, and skills with job requirements and organizational culture.



Assess your values in relation to your target job and employer.

We've identified 5 principal drivers to get you started. Consider which are your priorities, and remember, their relative importance to you may change with time:

- **Advancement.** Individuals who want advancement seek recognition or promotions for their talents and accomplishments on the job. Apart from monetary rewards, a simple “thank you” for a job well done, praise in the in-house newsletter, or a new job title is also a welcome acknowledgment. Although most employees hope their careers will offer opportunities for upward mobility and growth, those driven by advancement feel this urge more profoundly. If not advancing to their satisfaction, they'll move to another organization offering better prospects.
- **Autonomy.** Autonomous individuals have a strong need to do things their own way, at their own pace, and in line with their own standards. These individuals may find organizational life too restrictive and may seek a work environment that offers more freedom, such as consulting, teaching, or starting their own business.
- **Challenge.** Those who thrive on challenge have a competitive nature that drives them to overcome obstacles and to solve problems. These individuals may consider salary, job titles, and work area as secondary to the challenge of the task at hand. Most chemistry jobs contain some element of challenge; the variation is great—from large challenges like creating a new technology platform to small ones like routine analysis.
- **Security.** Security-driven individuals need stability and will seek an employer with a reputation for not reducing the workforce. They might look for jobs with tenure and predictable benefits, such as those in government. These individuals tend to be stable, reliable workers who will not challenge the system.
- **Balance.** Those who desire life balance tend to seek equilibrium in all aspects of their lives. Time is especially important—for example, they don't want to have to choose between family considerations and career success or self-development goals. Their lifestyles will influence decisions on such issues as relocation, family needs, work hours, and employee benefits.



Determine what motivators your job must provide to match what drives you.

Skills

A basic skill list is an important tool in your job search; use it to:

- Identify where you excel, then match those areas to an employer's needs to help sell yourself

- Include skills in your résumé that are targeted to specific jobs
- Determine which ads/postings to respond to
- Answer questions during interviews
- Assess a good job fit
- Increase self-confidence to market yourself.

Here are a few tips for generating a skills list:

- Find a quiet place, away from distractions. Sit down with a pen and paper (or a packet of 3" x 5" cards) or a computer with a database-sorting program
- Divide your life into logical segments such as before college, college, graduate school, postdoctoral, job 1, job 2, and so on
- Think about each period and record all the accomplishments you can recall—everything you achieved personally or professionally, in any order.

Do this exercise several times over a few weeks.

Once your accomplishment list is complete:

- Identify the skill categories that apply to each. Examples include chemistry sub-categories (organic, synthesis, natural products... whatever you excel at doing), communications, computers, literature searches, dealing with regulations, managing/leadership, developing teams, testing, analysis (with sub-categories such as NMR or mass spectrometry), business acumen, creativity, and so on.
- Refine your skill categories to 8–10.
- Write a skill category beside each accomplishment.
- Sort the list by skill category.
- Edit the list to remove redundancies and nonmeaningful entries.

When you've finished, you will have your skill list—a straightforward itemization of your abilities, with each backed up by specific accomplishments.

In addition to the purposes listed above, this process may reveal new job search areas to you. For example, an organic chemist could consider a job as a technical information specialist because of literature search skills.



Keep a current list of your abilities and accomplishments handy. Today's chemist needs soft skills as well as technical competence.

Locating the Job You Want

Smaller Employers

Most first-time or novice job seekers look to the large chemical employers—the big companies, government labs, hospitals, and nonprofit organizations. These large chemical companies and institutions are well known; they use campus recruiting as a main strategy, hiring professors as consultants to advise them on student hires. Often paying high salaries and providing other incentives, they are the objects of widely circulated stock market analyses and reports.

It's easy to find and target large employers, yet small companies are actually producing more jobs. (The US Department of Labor defines small companies as those with 50–500 employees; those with fewer than 50 are usually referred to as start-ups.)

Most small chemical companies are not household names. They tend to advertise jobs locally, their businesses often are quite specialized, and typically they don't have a human resources department to promote them.

Small companies are forming at rapid rates and are generating most new jobs in the US. Use local resources (such as radio and newspapers) as well as your contacts and websites to learn about small employers' hiring needs. Call the ACS Department of Career Services (800-227-5558) for more ideas and assistance.

Posted Jobs

A posted job is one that's advertised or somehow actively publicized by an employer to encourage applications—usually to fill the position as soon as possible.

Job postings can be direct or indirect:

- **Direct postings** are job descriptions that are made public, broadly or narrowly. Printed announcements often are internal postings on traditional or electronic bulletin boards to inform current employees. Jobs may be directly posted externally on the Internet, within the company's home page or another website section. Ads in local and/or national newspapers, journals and magazines (such as *Chemical & Engineering News*), data banks, or other Internet lists are also examples of direct postings.
- **Indirect postings** occur when an employer provides information about job openings to a third party—temporary employment agencies, headhunters, or faculty. Sometimes an available job will be intentionally leaked out to generate appropriate candidates. Jobs announced at employment clearinghouses sponsored by professional societies (ACS, Eastern Analytical Symposium, Pittsburgh Conference, and many



The Internet has created profound opportunities for all companies, large and small, to publicize themselves and their job openings. If your résumé is posted on major search engines, any employer can easily find it. Also be sure your networking efforts include large and small employers.



Don't be fooled by "temporary" jobs and "temporary" employment agencies. While some jobs truly are short term, it's common practice to hire new employees on a temporary basis to assess them for permanent employment.

others) are considered indirect postings because you must attend to learn about them. In addition, vendors at trade shows and technical meetings often have job opportunities to discuss, even if the opening isn't posted at all. (Remember that many vendors are small companies.)

Finding Posted Jobs

For directly posted jobs:

- Visit your sources regularly, including newspaper or magazine ads, Internet web pages, your network members, bulletin boards, and so forth
- Identify those jobs that seem to match your values, drivers, and skills (see Chapter 3)
- Follow instructions in the ad to apply for the job and line up an interview.

Because they are readily available to any applicant, competition is heavy for directly posted jobs.

To find indirect postings, you must go where the postings are placed:

- Call or visit temporary agencies and headhunters in your area to ask about jobs; remember, many temporary agencies have national and regional job lists, as well as local ones.
- Go to meetings that feature employment clearinghouses and visit the exhibitions area, where vendors display their products (ACS National Meetings hold the NECH twice per year).
- Be persistent in cold calling (more details later in this chapter).
- Bring résumés with you and hand them out.
- Try to do interviewing on the spot—encountering a potential employer in person can be a great advantage in the job search process.

Many candidates know about these techniques, so your competition may be heavy for indirectly posted jobs, too.

Career Transitions

Sometimes experienced chemists want to change their situation or field; these career transitions can include:

- Exchanging one lab research field for another
- Moving from a lab scientist's job to a nonlaboratory (or even management) position
- Going from a large company to a small one

- Shifting from a company office setting to a home office, and so on.

In a career transition, the job search process remains the same, but your target market is different. Your steps will include:

- Conducting a careful personal assessment (see Chapter 3) to be certain you have the values, drivers, and skills needed and to determine your new target employers
- Updating your skills list and training in any gaps that might keep you from your new position
- Adding to your network (see Chapter 5) practitioners in the field you're targeting; your current network members may not be useful in guiding you to new fields
- Changing your professional view of yourself by visualizing your future as already begun...label yourself as already performing in the new job; for example, if changing from an experimental organic chemist to an information specialist in the library, introduce yourself as a technical information specialist, and choose persons who work in that field for your network
- Revising your résumé to target your new field (and the specific job you want, when possible)
- Staying involved and alert to changes in yourself and your new field.



For a successful transition, stay tuned in to the changes needed in your skills and abilities, network, and professional identity.

Hidden Job Market

There's good evidence that, at any given time, around 2/3 of available jobs are "hidden"—meaning not advertised or posted—for a variety of reasons:

- Other jobs in the organization have higher priority for being filled
- The job is slated for budget approval, but not yet approved
- Particularly in smaller organizations, management is too busy to search for a needed employee
- Management has not yet recognized a serious need to hire.

Going after hidden jobs is well worth the effort because your competition may be unaware of them. You find hidden jobs by cold calling (described below) or networking (described separately in Chapter 5 to cover its numerous applications).

Cold Calling

Cold calling is the process of visiting an organization where you don't know anyone. Many salespersons use cold calls to introduce products or services or to provide information on new offerings or personnel changes. You can use this



Tapping into the "hidden" job market can increase job search success because you face less competition.

method to obtain a job with small and sometimes medium organizations (for large employers, the logistics are not as favorable).

The principle behind cold calling is that personal contact is much more effective than distant contact (calling, emailing, or blind mailing). Meeting with someone face to face to discuss the job and hand in your résumé demonstrates your genuine interest while enabling you to reinforce your value with a strong personal impression. Although cold calling can be very effective in selling your capabilities, unless you're comfortable approaching new people, it may not be successful. And if small talk is a problem for you, practice extensively with others before entering the door of a prospective employer. Also remember that in an era of heightened concern about security, an organization may be unwilling to meet with anyone without an appointment.

The process works like this:

- Decide on a locale where you'd like to live and work.
- Identify as many chemical employers in this location as you're willing to visit. Use your network, library, phone directories, the Internet, and other methods for locating organizations in your area of interest.
- Gather technical and business information about each employer. Access your library, the local Bureau of Labor office, Chamber of Commerce, and local newspapers as resources. For public companies, call and ask for their annual report; for others, call and ask for brochures or product/service information.
- Adjust your résumé to the employers' interests.
- Go to the main office of the organizations you've selected and ask to see the person who does the hiring. (You may not be fortunate enough to see this person at this visit, but be prepared for an interview.)
- Use "friendly small talk" to indicate to the person who receives you that you live in this area (or would like to), have heard good things about the organization, and believe you'd like to work for them.
- Get the receptionist's and the president's or CEO's name along with phone numbers for follow-up.
- Leave your résumé and ask that it be given to the CEO or person who does the hiring. Indicate that you'll call back in a few days.
- Follow up to determine the organization's interest in you. If they're not hiring, thank them for their consideration, ask if you can call back in a few months, and move on. If there is interest, try to arrange an interview.

- Be a bit assertive, always polite and tactful, throughout this process. Show interest and respect—and smile, using steady eye contact.

A variation of cold calling that's easily accomplished if you're attending a conference is visiting the exhibitors' area. Vendors are often available for chemists at ACS national and regional meetings, scientific society meetings such as EAS (Eastern Analytical Symposium), Pittcon (Pittsburgh Conference), ENC (Experimental Nuclear Magnetic Resonance Conference), ASMS (American Society for Mass Spectrometry), and others. Approach the exhibitor or vendor in much the same way as in cold calling; most will be happy to talk with you at their booth if they have a job opening and you have the appropriate skills.



Visiting exhibitors/vendors at a professional conference to inquire about jobs can be an easy form of cold calling.

Networking Is for Everyone

CHAPTER FIVE

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Networking is an important part of any job search and the source of many successful positions. This approach can help you in several ways:

- Members of a network obtain information about industry segments of interest and learn about the kinds of jobs available
- Each member generates and gathers ideas for brainstorming to help develop effective job-search strategies
- The networking process brings introductions to new people, who may then provide even more information, ideas, and introductions—expanding the process and the benefits.

Networking is a critical activity and it must be done actively, intelligently, and enthusiastically. If you think of your job search as a marketing exercise—selling your skills and abilities as a potential employee—then your network becomes the framework for your market development.

For targeting your job market, networking doesn't mean asking people to find you a job; it means engaging your network contacts to help you find a job through various communications and other strategies. In the end, *you* will identify and target the job and introduce yourself to an employer through personal meetings and your résumé. Occasionally, a network member may intervene directly with an employer for you, but this is not common.

Use your network to contact specific persons in the organization about the job and to give you an idea of corporate/institutional values. Ask positive, supportive network members if they'd be willing to speak up for you and serve as references. If so, give each a copy of your application and targeted résumé.

Building Your Network

Your network consists of everyone you know in the chemistry job marketplace plus everyone those people know, including:

- Colleagues you see regularly—supervisors, clients, professors, classmates, instrument vendors, service and repair people, neighbors, and relatives
- People you might see only occasionally, such as former classmates and colleagues, physicians, dentists, just to name a few.

Any of these individuals might have information or ideas you can use in your job search, but your professional contacts will normally be the most useful.

One approach for extending your network is to become active in professional associations. Link up with one or more that represent your fields of interest such



Networking is crucial to life-long career success.



Networking is regular communication between you and others for a specific purpose. Successful individuals have many overlapping networks in life—for work functions, hobbies, community activities, school, and others in addition to job searches.



Your network includes all the people you know, even if you interact only occasionally, and all the people they know.

as ACS, ASTM, AAAS, EAS, Pittcon, ENC, ASMS, and others (see page A-3). With ACS, for example, you can get involved by participating in some local section activities, then joining committees. You can also participate in Technical Divisions or submit a presentation/poster for an ACS regional or national meeting. Anything you can do to make yourself and your abilities visible will help in developing personal relationships and adding contacts to your network.

At meetings, you might talk to speakers after their presentations. Express interest in their work and ask for any suggestions in your job search. Have business cards to hand out as you meet and talk to people. In conversations, be prepared to tell people about your job search, your background, and your desired position. If you don't advertise yourself, no one else will.

Maintaining Your Network

Maintaining your network involves staying in touch for professional purposes. Helpful tips follow:

- Try using a card file, computer database, or electronic hand-held note pad to keep contact lists with addresses, phone numbers, and other useful information.
- Review your network records regularly to keep them current.
- Be sure to follow up on any leads suggested by your network members.
- Since networking is based on reciprocity, take every opportunity to assist others by referring people who have skills that a specific employer might find useful. Remember that someday you may call on them to return the favor.
- Keep your contacts informed about how your job search is progressing. Call them or send follow-up notes (handwritten or email to thank them for their time and willingness to help. If a job lead doesn't work out, go back and ask your contacts for the names of others who might help you to broaden your network and refine your job market targets.
- Reward others in your network by sharing job search techniques that have worked for you and job leads that you won't pursue.

Networking isn't just an occasional phone call—it is a vital element of professional life. To do your job search well, you need to multiply your visibility; networking is the only way to do that. By staying in touch with your network, and acknowledging each member regularly, and letting people know you take their job leads seriously, you can get a jump on the job market. There is abundant evidence that those who successfully rebound from job loss and make the best career transitions have an established network ready to help.

Applying the Internet to Your Job Search

CHAPTER SIX

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In addition to your network, the Internet is a great tool for targeting your job market. As discussed in Chapter 3, first complete your personal assessment.

With this information at your fingertips, you can:

- Research organizations of interest
- Search the Internet for posted jobs appropriate for you
- Locate hidden jobs (see Chapter 4)
- Be geographically and technically selective by using various sort routines
- Learn about professional organizations that can benefit your search.

Using the Internet Effectively

Internet use can be engrossing and time-consuming; be patient and disciplined, or you'll get distracted from your objective. Be clear about what you are seeking before you start and stick to your topics to avoid becoming frustrated or wasting time and energy.

A major difference between using the Internet and using your network for a job search is that your network usually filters information for you. Your network members have a sense of what you can do and what you might like or dislike. But to the Internet you're a stranger, and all information it offers is unfiltered. Fortunately, search engines keep getting better at helping you find the information you need quickly.

Internet Job Search Recommendations

Because the technology and service providers propelling the Internet are constantly changing, specific search engine or website recommendations may be outdated in only a few months. We urge you to visit the American Chemical Society site at www.chemistry.org/careers and www.cen-chemjobs.org. Many job search pamphlets and job lists are available to members, and ACS keeps these materials current.

If you're beginning your search and don't have a list of favorite sites, start by using a search engine:

- AltaVista
- Careerbuilder
- Dogpile



The Internet is an indispensable tool to target and research the job market. For help in using the Internet, go to your public library or school; also refer to Appendix C.



Many contacts and résumés are now shared by email.



Don't waste time aimlessly surfing the Internet, but use it wisely; remember that information on the Internet, unlike what your network provides, is unfiltered.



Visit www.chemistry.org/careers, the ACS Department of Career Services site, to support your job search efforts.

- Hotjobs
- Jobcenter
- Lycos
- Excite
- Monster
- Nextwave
- Webcrawler.

Some Internet service providers, such as AOL and Yahoo, also offer significant information on jobs. Your local librarian can be a big help in directing you to job-related Internet publications and resources. Other tips follow:

- Go to websites of the primary newspapers where you'd like to live and work and look for job lists/ads. Many local newspapers post online job information daily, and it can be searched by job type. Access current regional ads through major metropolitan newspapers such as *The New York Times* (www.nytimes.com), *The Washington Post* (www.washingtonpost.com), and *The San Francisco Chronicle and Examiner* (www.sfgate.com). Find current national ads in papers with national circulation, like *The Wall Street Journal* (careers.wsj.com). Try industry and local magazines' sites as well.
- Federal government agencies routinely advertise on the Web. The Office of Personnel Management maintains a site (www.usajobs.opm.gov) that lists current job openings by agency or profession. The Department of Commerce site, FedWorld (www.fedworld.gov/jobs/jobsearch.html), offers a search engine for all federal job openings. Federal Jobs Digest (www.jobsfed.com) is one of several commercial sites for accessing federal jobs. This site also has sections that describe federal jobs and benefits and advise on filing federal applications.
- "Academe This Week," a feature of the weekly *Chronicle of Higher Education*, has long been the best source for academic openings. Subscribers to the print edition can access job listings online from the current issue at www.chronicle.com/jobs, posted every Tuesday afternoon (nonsubscribers can access only past issues). You can search by job title or any key words you choose, as well as particular geographic regions.
- The Academic Position Network (www.apnjobs.com) is a free service that provides announcements of academic positions, including faculty, staff, postdoctoral, and administrative jobs.

APN announcements are unlimited in length and are kept online until removal is requested or until the closing date has been reached. As a result, you may find yourself unwittingly pursuing positions that have long been filled so check before spending time and energy. APN may be searched by country, state, and institution or key word.

- For potential industrial employers, many companies have sites with extensive business information and recent corporate press releases. They usually post career information and advertise their job openings there as well, with directions for submitting an application and résumé. America's Job Bank (www.ajb.dni.us), a computerized network linking 1800 Department of Labor and state-operated employment service offices, has information on well over a million positions. Most are full-time jobs in the private sector. Access is free to prospective employers or job seekers.



For a thorough, successful job search, you'll need to be skilled in Internet and email methods.

Electronic Résumé Tips

Many employers will request an electronic version of your résumé to expedite their process. You should be able to email your résumé to potential employers as well as post it to a site. When emailing your résumé:

- Always mention the position you're applying for and details requested in the ad/posting/conversation
- State in your email that you can relocate, if required
- Keep your email notes brief and to the point; include your contact information in your notes and on your résumé
- Make sure your file format is compatible; cut and paste a clean text version in the body of your email or as a plain text attachment
- Try sending the email to yourself first to see how it transmits, refining as necessary
- Use an email address that includes your name, preferably first and last; never use a "cute," whimsical, or otherwise questionable address
- Don't include a link to your personal home page if you have one.

See the ACS guide *Résumé Preparation—Tips for Chemical Professionals* for valuable details and examples to help with electronic and traditional résumés.

Academic Jobs

If you're aspiring to a chemical career in higher education, consider the characteristics described below.

Type of Institution

There are 4 main institutional categories in terms of highest academic degree awarded:

- PhD-granting universities (also referred to as research universities)
- MS-granting comprehensive universities and some colleges
- BS-granting liberal arts or 4-year technical colleges
- AS-granting community colleges.

Teaching Loads

Teaching loads vary, based on the institution:

- Research university teaching loads are typically 3–6 hours a week, with many more hours dedicated to leading and supervising research, students and writing research grant proposals
- College teaching loads generally vary from 10–15 hours a week, with additional commitments to lead and supervise research and to write grant proposals
- Community college teaching loads are heaviest by comparison—usually 20 or more hours a week. Usually no research is done at community colleges.

Research and Other Scholarly Productivity

- PhD-granting universities expect at least one publication per year over a period of 3–4 years and about \$100 thousand in grants. Top research universities, however, expect more—perhaps 10–20 publications in peer-reviewed journals and several hundred thousand dollars in external funding, including at least one significant grant from a major funding agency, such as NSF (National Science Foundation), NIH (National Institutes of Health), or DOD (Department of Defense).
- Colleges expect 2 or 3 solid publications over a 6-year period and \$30–\$100 thousand in grants.
- Community colleges expect few if any publications over a 6-year period. Obtaining external grants is usually not an expectation.

- Requirements for research productivity are greater at research institutions than at 4-year colleges, while 2-year community colleges usually do not expect faculty to conduct research.

Institutional Service

Faculty members usually are expected to participate in:

- Department and committee activities
- Professional activities.

Other types of service expectations will vary according to the school's mission. At major research universities, tenure-track assistant professors usually have minimum service obligations to allow focus on becoming recognized as world class in their fields of research.

Other Considerations:

- Among otherwise comparable educational institutions, there may be notable differences in mission and philosophy.
- Only about half of all undergraduate chemistry degree programs are ACS approved. Note, too, that some colleges offer chemistry curricula that do not lead to a degree in chemistry.
- In general, an earned PhD is the minimum requirement for appointments at a university or college. A Master's would be the minimum for appointments at a community college, with a PhD considered desirable.
- Postdoctoral research experience is increasingly expected for university or college appointments and is becoming increasingly mandatory for a position at a major research university.
- Most full-time appointments are for 10 months, with approximately 9 months of teaching expected. Summer employment may be negotiated separately. A few major research universities now offer 12-month appointments to newly hired assistant professors. Since this practice creates a competitive edge in recruiting, other major research universities may follow suit. Initial appointments may be for 1, 2, or 3 years, and be renewable with satisfactory performance.
- For tenure-track appointments, the tenure decision is usually made after the sixth year. In many cases, tenure-track faculty members receive a major performance review late in the third year to let them know where they stand and to advise on expectations over the next 3 years.

- Tenure and promotion are usually linked. It is also possible to receive a temporary or adjunct appointment, sometimes referred to as “contingent” positions, that ordinarily do not lead to tenure. Here, the job expectations are clearly defined and usually are limited to teaching and lab instruction. Unfortunately, these positions have replaced many tenure-track jobs as colleges and universities seek more ways to cut operating expenses.
- The degree of teaching and research autonomy in an academic position is usually what makes it appealing. The salaries are generally less than those in industrial jobs, although many senior faculty members at top research institutions are very well compensated. Also, as a major employment benefit, some institutions allow free or greatly reduced tuition for family members.
- The key credential when applying for an academic position is your *curriculum vitae*, or CV. It presents in more detail everything that would be on a résumé, with a special focus on scholarly productivity. It also includes your complete list of publications and presentations. As a companion document, you should have a research proposal appropriate for the institution’s mission and facilities. A statement of your teaching philosophy may also be requested. Startup money available for academic positions can vary from a few thousand at a small liberal arts college to nearly a million at a research university.
- Recognize that preparing a successful application package can take many months. Your academic research adviser will help you organize your application materials and coach you through the procedures. Obtaining a faculty position is a sponsored process. Your adviser will counsel you on appropriate positions and will help you in making contacts. In return, you’re expected to follow your adviser’s guidance and keep them fully informed.

Each institution varies in characteristics and expectations. For the institutions that interest you, find out the job obligations, requirements for promotion, and resources offered to beginning faculty *before* you consider applying. Your graduate or postdoctoral research adviser can help you obtain that information.

Academic jobs in chemistry and chemical engineering are regularly listed in *Chemical & Engineering News* and the *Chronicle of Higher Education*. An excellent website is www.nextwave.org for many links to additional sources.



The *curriculum vitae*, a research proposal, and a statement of teaching philosophy are the usual credentials you submit to apply for an academic position. (See the ACS publication *Résumé Preparation—Tips for Chemical Professionals* for details.)

Starting Your Own Business

CHAPTER EIGHT

8



Contact the Small Business Administration at www.sba.gov as the first step if you're serious about starting a business of your own. Also contact SCORE at www.score.org.

The concept of going into business for yourself can be alluring. Many chemists give thought to it, especially if part of a reduction in force. Graduate students and professors may consider it because of inventions or business relationships developed at the university. Small groups have succeeded in manufacturing or service businesses by focusing on materials (chemicals), instruments, patents, or markets from a previous large employer—often when the item becomes available for spin-off or purchase because it doesn't meet the large organization's business objectives.

If you're seriously considering your own business, first contact the Small Business Administration (SBA). This government agency offers constructive advice on information resources, raising capital, and preparing a business plan. Another useful resource is SCORE (Service Corps of Retired Executives). They have offices throughout the country staffed with retiree-volunteers to provide caution and perspective based on real experience. You can also contact the ACS Division of Small Business.

Once you go into business for yourself, your life will never be the same. Gone is the conventional 40-hour week. And besides the technical knowledge, you must also become adept in dealing with overhead, bankers, accountants, government regulations, lawyers, payroll and tax obligations, personnel issues, marketing and advertising, and other concerns. Along with increased freedom, being an entrepreneur brings increased responsibility.

Having your own business can be rewarding and exciting, yet it does present challenges; many new entities fail within a short time—usually because they lack a sound business plan or sufficient capital. In addition to contacting the SBA and SCORE:

- Study the situation carefully, seriously, and comprehensively before you pursue it
- Seek the advice of a business lawyer on how best to incorporate.

Being a Consultant

A few consulting firms use chemists and chemical engineers to serve as technical consultants, sometimes for short-term projects. (Check consulting firm websites and your network members to find which firms use external consultants.) These free-lance jobs are often filled by chemists who are strong in a technology area but don't want the responsibility of maintaining their own business. Consulting jobs tend to pay very well, but often involve long hours and extensive travel. Because the projects require advanced knowledge and skills in one or more prized technology niches, they call for experienced individuals who also have broad chemical knowledge as well as superior problem-solving and excellent oral/written communication abilities.

The appeal of being a consultant includes:

- Supplementing other income
- Enhancing professional vitality through diverse experience in a variety of projects
- Maintaining autonomy.

If you're considering independent consulting, you'll have different challenges than those of an employee or entrepreneur. Think of yourself as a contractor while answering these questions:

- *Do I have a position of strength that I can sell?*
- *Do I excel in a unique technology niche?*
- *Is there a need or market available for that niche?*
- *Why would an organization hire me as a consultant?*

Once you feel you can obtain clients and generate a business base, there are other issues to understand and resolve in being a successful consultant:

- Know what you want out of being an independent consultant by performing a personal assessment first (see Chapter 3).
- Be realistic about your financial situation. You may need 2 years or more as a consultant before you have a good positive cash flow.
- Recognize that you'll need your own liability, health, and other insurance as well as bookkeeping and other services. You'll also need to pay your own taxes (your client will report your earnings to the IRS on Form 1099).



To work as a chemist for a consulting firm, you must have advanced knowledge of an in-demand technology niche.



Some individuals generate consulting jobs while still employed, using their network and current position of strength to gather potential projects before making a break to be on their own.



You may have to work 2 or more years before consulting returns a profit.

- Respect any confidentiality agreements you sign regarding a former employer's or a client's process technology, product compositions, and sales/marketing/pricing information.
- Acknowledge that you'll usually work according to the terms of a standard agreement that specifies job duties, rate of pay (hourly or per diem), and duration. Examine the document carefully to be sure it's what you expect and that your expenses are covered before signing.

You'll find several good books written for chemist consultants, with chapters on finding clients, marketing your services, and dealing with challenges. Search for the latest editions on major book company websites (Amazon, Borders, Barnes & Noble, etc.) as well as Chemical Consultants Network (www.CCN.org) and the resources in Appendix C.

Staying Marketable

Today, no job offers lifetime permanence; organization and personal objectives change rapidly and frequently. Your job security comes from within *you*—it's your ability to find another job quickly.

Focus less on how secure your job is and more on how to keep yourself marketable, your career flourishing, and your options open. To be continually employed, ready to respond in a tight job market, and in control of your professional destiny, you must steadily invest effort in staying marketable.

Here are some broad recommendations for keeping yourself valuable; your personal and professional goals will determine how you apply them:

- **Keep your network alive**—Networking is critical to your job search and ongoing market value (see Chapter 5). Never stop asking people for information, ideas, and introductions to friends and colleagues who may be able to assist you with a job search. These professional contacts can also help you increase your technical knowledge in or outside your own area of expertise.
- **Expand your knowledge and skills**—Commit to lifelong learning. Amazingly, many chemists don't take enough time to maintain professional viability. Keep current in your field by networking with colleagues in your professional society, enrolling in continuing education classes, reading, and attending seminars. When new technology is introduced, learn about it. Become expert in the latest technology in your area of specialization. Read broadly to stay on top of what's happening in chemistry in general as well as in your field. Periodically assess your values, drivers, and skills (refer to Chapter 3) and stay informed about employment trends (discussed in Chapter 2). This gives you control over your career and determining which options you want to explore, where your technical knowledge best fits, and what you need to improve. Interpersonal skills, ability to work as part of a team, and communication skills are as important as technical abilities in maintaining your marketability. You'll also need to continue developing business awareness; regularly browse business-related publications such as *The Wall Street Journal* and *Business Week*. Also remember to connect with related disciplines such as physics, biology, and engineering.
- **Make yourself and your abilities visible**—Take credit for what makes you special, and build on it. Make an effort to attend local, regional, and national ACS and other professional meetings related to your interests. Seek recognition for your work by writing patents and



Job security is the ability to get another job quickly.



See the ACS booklet *Interviewing Skills for Chemical Professionals*, Chapter 5, for more on these 4 recommendations.

publications and giving presentations; also use your writing and presentation skills in support of your colleagues and managers. These activities are not self-serving; they add value to your work. Becoming a mentor in your organization and helping professional associations carry out their mission are other ideas for staying visible. For example, you might join a technical committee on consensus standards in ASTM or a committee organizing a symposium in ACS or EAS. Involvement will bring you not only recognition, but also more contacts and considerable satisfaction.

- **Be flexible**—New directions may present themselves—an internal lateral move, relocating, taking a short-term assignment in another field, joining a task force or project team. Keep an open mind about these opportunities. Also consider furthering your education in a new or related field through after-hours programs or professional activities. Many chemists revitalize their careers and progress to new ones as a result of such initiatives.

ACS Department of Career Services



The American Chemical Society Department of Career Services exists to enhance the economic and professional status of chemical professionals by providing:

- Career assistance
- Contact with employers
- Information about employment data, trends, and issues
- Salary Comparator.

Programs and services are offered in 6 categories (see details below):

- Employment services
- Personalized career assistance
- Workshops and presentations
- Workforce analysis
- Local Section Career Program
- Career-related publications

Employment Services

- *C&EN (Chemical & Engineering News)* classifieds and careers online (<http://cen-chemjobs.org>)
- NECH (National Employment Clearing House)
- RECH (Regional Employment Clearing House)

Personalized Career Assistance

- Career Consultant Program
- Mock interview sessions
- Résumé and CV reviews

Workshops and Presentations

- Career management
- Effective job searching
- Employment outlook
- Recruiters panel

Workforce Analysis

- Annual salary surveys
- Millennium Series
- Special studies

Local Section Career Program

Contact Karen Dyson, DCS, at 800-227-5558, ext. 4432 or email her at k_dyson@acs.org.

Career-Related Publications

- Academic Professional Guidelines
- Careers for Chemists—A World Outside the Lab
- Career Transitions for Chemists
- The Chemist's Code of Conduct
- Coping With Job Loss
- Early Careers of Chemists
- Employment Guide for Foreign-Born Chemical Professionals
- Interviewing Skills for Chemical Professionals
- Job–Search Strategies for Chemical Professionals
- Lifetimes in Chemistry
- Professional Employment Guidelines
- Resources for Career Management
- Résumé Preparation—Tips for Chemical Professionals
- What a BS/BA Chemist Should Consider Before Accepting an Industrial Position
- What a Chemist Should Consider Before Accepting a Government Position
- What a Chemist Should Consider Before Becoming a Consultant
- What a MS/MA Chemist Should Consider Before Accepting an Industrial Position
- What a PhD Chemist Should Consider Before Accepting an Academic Position



- What a PhD Chemist Should Consider Before Accepting an Industrial Position
- Women Chemists.

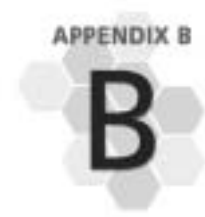
These services are available to all ACS members—full members, national and student affiliates. For more information, contact:

American Chemical Society
Department of Career Services
1155 Sixteenth Street, NW
Washington DC 20036
800-227-5558 ext. 4432
<http://chemistry.org/careers>
career@acs.org

Acronyms from page 18

ACS	American Chemical Society
ASTM	American Society for Testing and Materials
AAAS	American Association for the Advancement of Science
EAS	Eastern Analytical Symposium
Pittcon	Pittsburgh Conference
ENC	Experimental Nuclear Magnetic Resonance Conference
ASMS	American Society for Mass Spectrometry

Suggested Reading



Resources for Job Searching

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- Bird, Caroline. *Second Careers*; Little, Brown and Co.: Boston MA, 1992.
- Birsner, E. Patricia. *Mid-Career Job Hunting*; Prentice-Hall: Englewood NJ, 1991.
- Connor, J. Robert. *Cracking the Over-50 Job Market*; PLUME: New York NY, 1992.
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- Krannich, Ronald L.; Krannich, Caryl Rae. *New Network Your Way to Job and Career Services*; Impact Publications: Manassas Park VA, 1995.
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- Logue, Charles H. *Outplace Yourself*; Bob Adams: Holbrook MA, 1993.
- Matson, Jack V. *Effective Expert Witnessing*; CRC Press: Boca Raton FL, 1994.
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- Petersen's Hidden Job Market 2000*; Peterson's Guides: Princeton NJ, 2000.
- Peterson, C. D. *Staying in Demand*; McGraw-Hill: New York NY, 1993.
- Petras, Kathryn; Petras, Ross. *The Over-40 Job Guide*; Simon & Schuster Trade: Bethlehem PA, 1993.
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- Sanders, Debra. *The Complete Business Letter Guide...From Salutations to So Long*; Sanders Editorial: Tucson AZ, 2000.
- Studner, Peter K. *Super Job Search: The Complete Manual for Job-Seekers and Career-Changers*; Jamenair Ltd., Los Angeles. 1998.
- Wendleton, Kate. *Through the Brick Wall: How to Job Hunt in a Tight Market*; Random House, 1993.
- Witt, Melanie Astaire. *Job Strategies for People With Disabilities*; Peterson's Guides: Princeton NJ, 1992.

Yate, Martin. *Cover Letters That Knock 'em Dead 2000*; Adams Media Corp., Inc.: Holbrook MA, 2000.

Yate, Martin. *Résumés That Knock 'em Dead 2000*, 4th ed.; Adams Media Corp., Inc.: Holbrook MA, 2000.

Resources for Self-Assessment/Decision Making

Bolles, Richard Nelson. *The 2003 What Color Is Your Parachute?* Ten Speed Press: Berkeley CA, 2003.

Covey, Stephen R. *The 7 Habits of Highly Effective People*; Simon & Schuster Trade: Bethlehem PA, 1990.

Feibelman, Peter J. *A Ph.D. is NOT Enough*; Perseus Press, 1994.

Koonce, Richard. *Career Power*; AMACOM: New York NY, 1994.

Morrissey, George L. *Creating Your Future*; Berrett-Koehler: San Francisco CA, 1992.

Rivera, Miguela. *The Minority Career Book*; Bob Adams: Holbrook MA, 1991.

Stumpf, Stephen A.; DeLuca, Joel R. *Learning to Use What You Already Know*; Berrett-Koehler: San Francisco CA, 1994.

Tieger, Paul D.; Barron-Tieger, Barbara. *Do What You Are*, 3rd ed.; Little, Brown and Co.: Boston MA, 2001.

Resources for Interviewing

Drake, John D. *The Perfect Interview*; AMACOM: New York NY, 1991.

Medley, H. Anthony. *Sweaty Palms: The Neglected Art of Being Interviewed*; Ten Speed Press: Berkeley CA, 1992.

Yate, Martin. *Knock 'em Dead 2002*, Adams Media Corp., Inc.: Holbrook MA, 2001.

Resources for International Employment

Bell, Arthur H. *Great Jobs Abroad*; McGraw-Hill: New York NY: 1997.

Hachey, Jean-Marc. *A Canadian Guide to Working and Living Overseas*, 3rd ed.; Intercultural Systems/Systemes Interculturels (ISSI): Ontario, Canada, 1998.

Krannich, Ronald L.; Krannich, Caryl Rae. *The Almanac of International Jobs and Careers*; Impact Publications: Manassas Park VA, 1994.

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Lay, David; Leerburger, Benedict A. *Jobs Worldwide*; Impact Publications: Manassas Park VA, 1995.



Electronic Career Resources



Employment Guides on the Web

- Bernard Haldane Associates, <http://www.job-hunting.com>
- Career Action Center, <http://www.careeraction.org>
- Career City, <http://www.careercity.com>
- Career Web, <http://www.employmentguide.com>
- Career Resource Center, <http://www.careers.org>
- Catapult/NACE (site of the National Association of Colleges and Employers, formerly the College Placement Council), <http://www.jobweb.org/catapult/catapult.htm>
- Job Star Central, <http://jobstar.org>
- Riley Guide, <http://www.rileyguide.com>
- Monster Trak, <http://campus.monster.com>

Online Job Listings

- Academe This Week (from the Chronicle of Higher Education), <http://chronicle.com>
- America's Job Bank, <http://www.ajb.dni.us>
- Career Builder, <http://www.careerbuilder.com>
- Career Magazine, <http://www.careermag.com>
- Career Site, <http://www.careersite.com>
- Career Web, <http://www.employmentguide.com>
- Job Options, <http://ww1.joboptions.com>
- Federal Jobs Digest, <http://www.jobsfed.com>
- FedWorld, <http://www.fedworld.gov/jobs/jobsearch.html>
- Internet Career Connection, <http://iccweb.com>
- Monster, <http://www.monster.com>
- USAJobs, <http://www.usajobs.opm.gov>

Résumé Posting and Database Recruiting Sites

Career Magazine, <http://www.careermag.com/careermagazine>

Career Site, <http://www.careersite.com>

Career Web, <http://www.employmentguide.com>

Monster, <http://www.monster.com>

Researching Companies and Academic Institutions Online

EINet, <http://galaxy.tradewave.com>

Hoover's Online, <http://www.hoovers.com>

<http://www.mit.edu:8001/people/cdemello/univ.html>

<http://www.thomasregister.com>

Sites for Researching Geographic Information

Online Chambers of Commerce, <http://online-chamber.org>

Salary Calculation, <http://www.homefair.com/homefair/cmr/salcalc.html>

Science- or Chemistry-Specific Electronic Job Listings

ACS Career Services, <http://www.chemistry.org/careers>

C&EN Chemjobs: <http://cen-chemjobs.org>

National Academy of Sciences, <http://nationalacademies.org>

Science a Go Go, <http://www.scienceagogo.com>

Science Magazine, American Association for the Advancement of Science (AAAS), <http://science-mag.aaas.org>

Science's NextWave, <http://www.nextwave.org>

The World of Chemistry, <http://www.chemsite.com>

Chemical Engineering Opportunities, <http://www.sts-aiche.org>

Sites for Federal Employment Opportunities

<http://www.jobsfed.com>

<http://www.usajobs.opm.gov>

<http://www.fedworld.gov/jobs/jobsearch.html>



International Employment Listings on the Web

American Association for the Advancement of Science's Science magazine, <http://recruit.sciencemag.org>

Inter Career Web, <http://www.intercareer.com>

Other International Employment-Related Sites

Biotechnology Companies (in the United States and abroad),
<http://www.hum-molgen.delcgi-bin/companies.pl?search>

Your Gateway to Opportunities Worldwide
(Asia, Australia, Canada, Japan, UK, Hong Kong, France, Spain),
<http://www.careerasia.com/careermatch.html>
(personalized career-matching service)

A faint, light orange chemical structure diagram is visible in the background of the page. It consists of a network of interconnected lines and circles, representing a molecular or crystal lattice structure. The circles are arranged in a somewhat regular pattern, with lines connecting them to form a complex, interconnected network.

AMERICAN CHEMICAL SOCIETY

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0-8412-3914-2